PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH.

The JOURNAL of GEOGRAPHY

A MAGAZINE FOR TEACHERS

Published by A. J. Nystrom & Co., for The National Council of Geography Teachers
George J. Miller, Editor and Secretary

VOLUME XXII — MAY, 1923 — No. 5

IN THIS ISSUE

ZION CANYON NATIONAL PARK, UTAH
WILLIAM J. MILLER

TEACHING THE GEOGRAPHY OF A STATE
MENDEL E. BRANOM

THE NEW GEOGRAPHY AND NEWSPAPER CLIPPINGS
EMMA P. WEST

THE CHANGING ESKIMO. AN EDITORIAL
A. E. PARKINS

GEOGRAPHY IN THE NORMAL SCHOOL
JOHN A. H. KEITH

SUMMER COURSES IN GEOGRAPHY
P. E. WILLIAMS

THE JOURNAL OF GEOGRAPHY

A MAGAZINE FOR TEACHERS

Editor

GEORGE J. MILLER
State Teachers College, Mankato, Minn.

Associate Editors

R. H. Whitbeck, University of Wisconsin, Madison
R. M. Brown, Rhode Island College of Education, Providence
Erna Grassmuck, State Department of Public Instruction, Harrisburg, Pa.
A. E. Parkins, George Peabody College for Teachers, Nashville, Tennessee

Business office of Journal of Geography

A. J. NYSTROM & CO.
2249 Calumet Ave., Chicago, Ill.

SUBSCRIPTION TERMS

The subscription price is $2.00 a year, payable in advance; the price of single copies is 25 cents. Orders for less than a half year will be charged at single-copy rate. Postage is prepaid by the publishers on all orders from the United States, Mexico, Cuba, Porto Rico, Panama Canal Zone, Republic of Panama, Hawaiian Islands, Philippine Islands, Guam, Samoan Islands, Shanghai. Postage is charged extra as follows: For Canada, 30 cents on annual subscriptions (total $2.30), on single copies 3 cents (total 28 cents); for all other countries in the Postal Union, 52 cents on annual subscriptions (total $2.52), on single copies 6 cents (total 31 cents).

The *Journal* is the official organ of the National Council of Geography Teachers and is sent to all members of the organization. The annual dues, $1.50, are payable to the *Journal of Geography*. Extra postage rates for copies sent to foreign countries should be added to the membership dues.

Patrons are requested to make all remittances payable to the *Journal of Geography*, in postal or express money orders or bank drafts.

Members and subscribers who wish to continue receiving the *Journal* must send remittances promptly to assure the volume being complete.

Send manuscript and books for notice or review to the *Editor*.
Send orders for back numbers to *Journal of Geography*.

Agent for Great Britain. Arthur F. Bird, 22 Bedford Street, Strand, London, W. C. 2.

Published monthly except June, July and August

PUBLICATION OFFICES: 450 AHNAIP STREET, MENASHA, WISCONSIN

All Business Correspondence, Membership Dues, and Subscriptions should be sent to

A. J. NYSTROM AND COMPANY,
PUBLISHERS, JOURNAL OF GEOGRAPHY,
2249 CALUMET AVENUE, CHICAGO

Entered as second-class matter January 15, 1919, at the postoffice at Menasha, Wisconsin, under the Act of March 3, 1879.

THE JOURNAL OF GEOGRAPHY

CONTENTS FOR MAY, 1923

Zion Canyon National Park, Utah. By William J. Miller 161

Professor Miller is head of the department of geology at Smith College; field geologist for the New York Geological Survey; and author of "An Introduction to Historical Geology"; "The Geological History of New York"; "The Adirondack Mountains"; "Geology: The Science of the Earth's Crust," and numerous bulletins published by the New York State Museum.

Teaching the Geography of a State. By Mendel E. Branom 171

Mr. Branom is head of the department of geography, Harris Teachers College, St. Louis, Missouri; author of the "Project-Method in Education"; co-author of "The Teaching of Geography" and of "The Determination and Measurement of the Minimal Essentials of Elementary School Geography." He is an active worker for the advancement of geography teaching and is a frequent contributor to the *Journal*.

The New Geography and Newspaper Clippings. By Emma F. West 176

Miss West is Master's Assistant and teacher of geography in the Agassiz School, Boston, Massachusetts.

The Changing Eskimo. An Editorial. By A. E. Parkins 182

Dr. Parkins is head of the department of geography at George Peabody College for Teachers, Nashville, Tennessee, and Associate Editor of the *Journal*.

Geography in the Normal School. By John A. H. Keith 196

Professor Keith is Principal of the State Normal School at Indiana, Pennsylvania; author of "Elementary Education, Its Processes and Problems," and co-author of "The Nation and the Schools."

Summer Courses in Geography. By F. E. Williams 198

Mr. Williams is an assistant professor of geography in the Wharton School of Finance and Commerce, University of Pennsylvania.

Authors alone are responsible for opinions and statements in the *Journal*.

VIRGINIA

has recently adopted, for basal use in the public schools of the state, the

FRYE-ATWOOD
NEW GEOGRAPHIES

Book One ***Book Two***

The remarkable interest and simplicity of Book One, the usable regional system of Book Two, and the all-around soundness of these unusual geographies account for the thousands of adoptions in states, cities, and towns since their appearance.

GINN AND COMPANY

Boston New York Chicago London
Atlanta Dallas Columbus San Francisco

The JOURNAL of GEOGRAPHY

VOLUME XXII MAY, 1923 NUMBER 5

ZION CANYON NATIONAL PARK, UTAH

WILLIAM J. MILLER

Smith College, Northampton, Mass.

Considering its length, narrowness, great depth, splendor of coloring, and marvelous diversity of rock sculpturing, Zion Canyon, Utah, is probably without an equal on the face of the earth. In its general shape and dimensions, Zion Canyon suggests Yosemite Valley. Yosemite is somewhat deeper and grander in its proportions and contains wonderful waterfalls, but it utterly lacks the brilliance of rock coloring of Zion Canyon. Yellowstone Canyon is even more brilliantly colored, but it is much smaller, and lacks great vertical rock walls which are so characteristic of Zion Canyon. The magnitude of the Grand Canyon of Arizona is far greater than that of Zion Canyon, but its coloring is distinctly less resplendent, and none of its vertical rock walls are nearly so lofty. In short, Zion Canyon, called by R. S. Yard the "Rainbow of the Desert," possesses a uniqueness all its own. As stated by our National Park Service: "Zion Canyon whose carved and fretted sandstone walls rise 3,000 feet (and more) in places above the canyon floor—2,000 feet gorgeously colored in mottled reds surmounted by a thousand feet in marble white—is one of the most striking spectacles which even America has to offer." It has very recently (1919) been set aside as a National Park.

Zion Canyon was known to the Mormons many years ago, but only during the last eight or ten years has it been visited by more than a very few travelers. Even now tourist travel to this glorious natural wonder of our southwest is only a mere suggestion of what it is destined to be within the next quarter of a century.

Zion Canyon is situated in southwestern Utah not far from the border of Arizona. It is a mighty gash in the lofty Colorado Plateau near its northwestern border, and many miles from any railroad. It is now possible to start from Lund station on the Los Angeles and Salt Lake Railroad and travel nearly 100 miles to Zion Canyon by automobile stage during the summer season. Every mile of this ride is one of fascinating interest.

More than 90 miles from Lund Station, the traveler reaches the village of Rockville which lies near the junction of the Virgin River and its important tributary from the north called Zion Creek. In other words, Rockville is situated near the mouth of the glorious Zion Canyon thru which Zion Creek flows for fully 15 miles. From the relatively wide floor of the Valley of the Virgin at Rockville, marvelous close-range views confront the traveler on every side. Grandest of all, however, is a mountainous pile of exquisitely sculptured and amazingly colored rock on the north, lifting its head 7,650 feet above sea level, and 4,000 feet above the floor of the valley of the Virgin River! It is the majestic "Western Temple" of the Virgin, so named by the Mormons who were probably the first white men to enter Zion Canyon The Western Temple marks the western side of the grand portal of Zion Canyon, (Fig. 1), while the eastern side of the portal is marked by The Watchman which rises 2,500 feet above the river. The Watchman is a magnificent pile of sandstone whose main body of red, surmounted by a great crown of white, rests upon a base of strata of variegated colors.

DESCRIPTION OF THE CANYON

Proceeding northward from Rockville to Springdale village, which lies in the grand portal of Zion Canyon between the Western Temple on the west side and The Watchman on the east, the traveler enters Zion Canyon whose wondrous beauty and grandeur can only be suggested to the writer by means of words and pictures. How easy it is to understand why the Mormons, when they looked upon the glory of the canyon thought of their Great Zion, and promptly named it Little Zion!

After passing the grand portal, the road leads for six miles thru the relatively straight canyon to the tourist camp in its midst. Above the canyon floor, which is about 4,000 feet above sea level and about one-fourth to one-half of a mile wide, rise magnificent, often precipitous, walls of sandstone to heights of 2,000 to over 3,000 feet. The lower 2,000 feet of the walls thruout the six miles consist of a red to brownish red sandstone, while those portions of the walls which very commonly rise above 2,000 feet always consist of a great layer of light gray to nearly white sandstone whose full thickness is about 1,000 feet. This is because the sandstone is made up of two great practically horizontal formations, one of nearly white resting upon the other of red. The very highest summits have caps of bright red sandstone resting upon the white, these red caps being remnants of a once widespread high-level formation.

In the writer's opinion the most impressive close-range view in all of Zion Canyon is that of the Western Temple as it appears from the east from the road about one and one-half miles north of Springdale. Almost the full height (4,000 feet) of the Temple is here presented to the beholder in the form of an almost sheer cliff. Upon hundreds of feet in thickness of variously colored strata rests the 2,000-foot layer of red sandstone, upon which in turn lies the 1,000-foot layer of light gray sandstone streaked with red, and at the top of all the great flat cap of bright red sandstone several hundred feet thick.

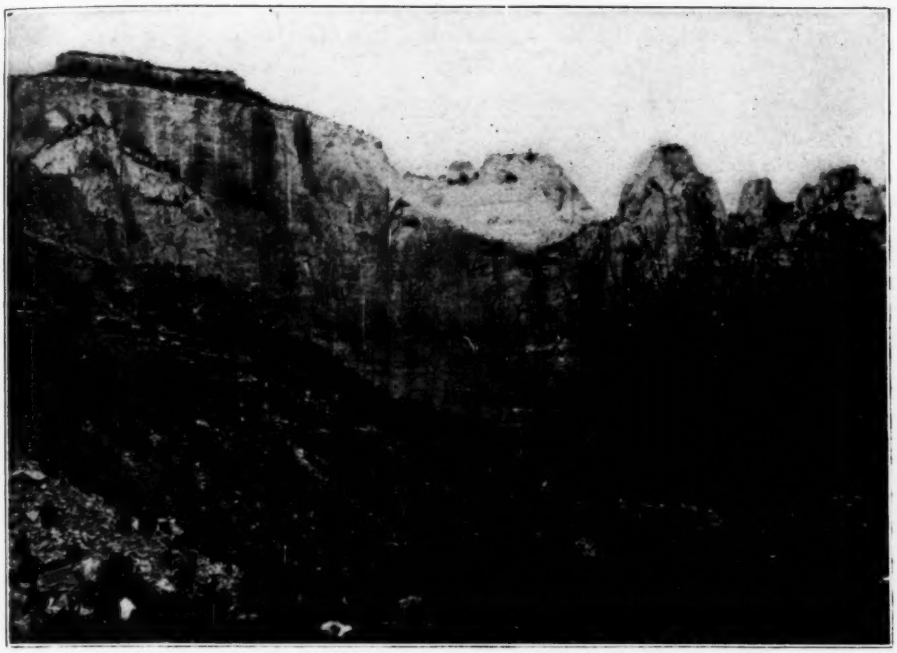

FIG. 1. The Western Temple (on left) and the Towers of the Virgin (on right) near the southern end of Zion Canyon as seen from the road near Springdale. The Temple rises 3,800 feet above the road. Photograph by the author.

It was from this inspiring point on the road that the photograph reproduced as Figure 1 was taken by the writer.

Adjoining the Western Temple on its right (north) are the Towers of the Virgin, a series of gigantic red monoliths, capped by white, which have been chiseled by nature's tools out of the western side of the canyon (Fig. 1).

About two miles north of Springdale the glorious Eastern Temple is seen to rise majestically nearly 3,500 feet above the floor of the valley on its eastern side. The impressiveness of the view can hardly

be exaggerated (Fig. 2). In all of his wide experience as a traveler the writer never beheld anything comparable to it. It rises in the form of a stupendous dome, brownish red in its lower part and nearly white in its upper part, with a large cap of red at its very summit. Standing back some distance from the general canyon wall, the Eastern Temple is guarded in front by a great jagged tower of red sandstone, and on the side (north) by a gigantic white-topped tower which there forms the canyon wall.

A little farther along, the traveler finds himself in a narrower part of the canyon between two stupendous rock walls one to two

FIG. 2. The Eastern Temple (3,500 feet high) flanked on the left by three peaks which form part of the eastern wall of Zion Canyon near its southern end. Photograph by the author.

miles long—the Streaked Wall on the west and the Brown Wall on the east. These walls, which rise 2,500 feet to over 3,000 feet above the floor of the valley (or canyon), are about a third of a mile apart at the bottom, and less than a mile apart at the top. A thousand feet or more of the height of each wall is in the form of a sheer precipice.

About three miles up the canyon from Springdale the traveler comes into plain view of the Three Patriarchs which form a series of magnificent monoliths of brownish red sandstone capped with white.

These great rocks form part of the canyon wall on the western side, and each rises more than half a mile above the valley floor (Fig. 3).

A mile beyond the Three Patriarchs the road reaches the Wylie Camp where visitors are cared for in the very midst of the glorious Zion Canyon.

Two miles beyond the Wylie Camp the grandest and highest single rock ledge of the upper half of the canyon rises abruptly from the river as an almost sheer precipice to the amazing height of 3,000 feet. This El Gobernador, also called the Great White Throne, is one of the world's loftiest and noblest rocks (Fig. 4). Its general

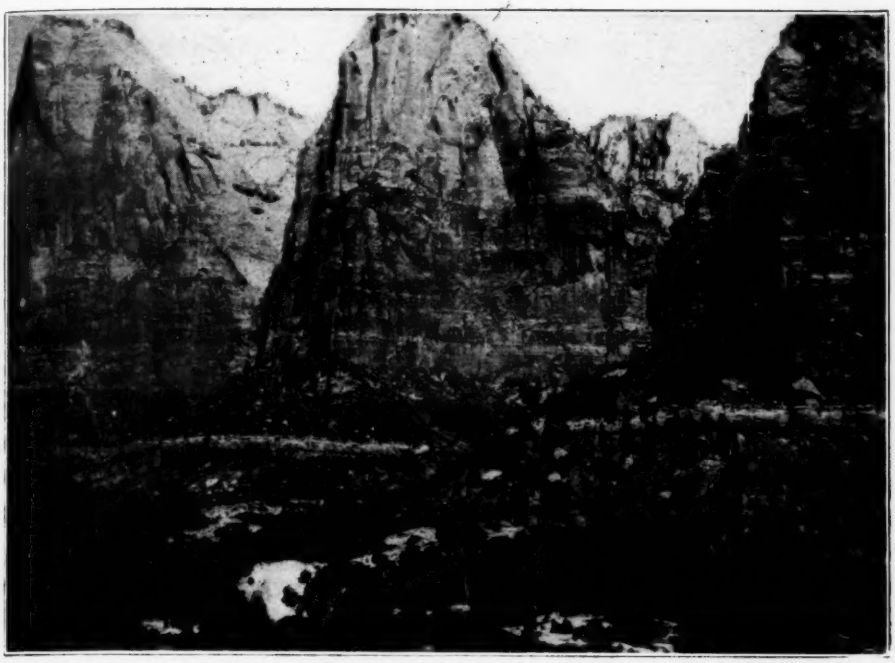

FIG. 3. The Three Patriarchs, each about 3,000 feet high, forming part of the wall of Zion Canyon about a mile south of the Wylie Camp. Photograph by the author.

prismatic form, brownish-red in its lower two-thirds and nearly white in its upper third, has been sculptured out of the eastern wall of Zion Canyon. The famous El Capitan of Yosemite Valley surpasses El Gobernador in height, massiveness, and precipitousness, but not in magnificence of coloring. Across the canyon from El Gobernador rises another great rock called Angel's Landing.

Near the base of El Gobernador the road now ends, but, continuing his journey by trail, the traveler finds that the canyon with the river at its bottom swings sharply to the west around the great tower-like

Angel's Landing and then resumes its northerly course. The walls of the canyon are here much closer together than they are in its lower part between Springdale and the Wylie Camp, but the same

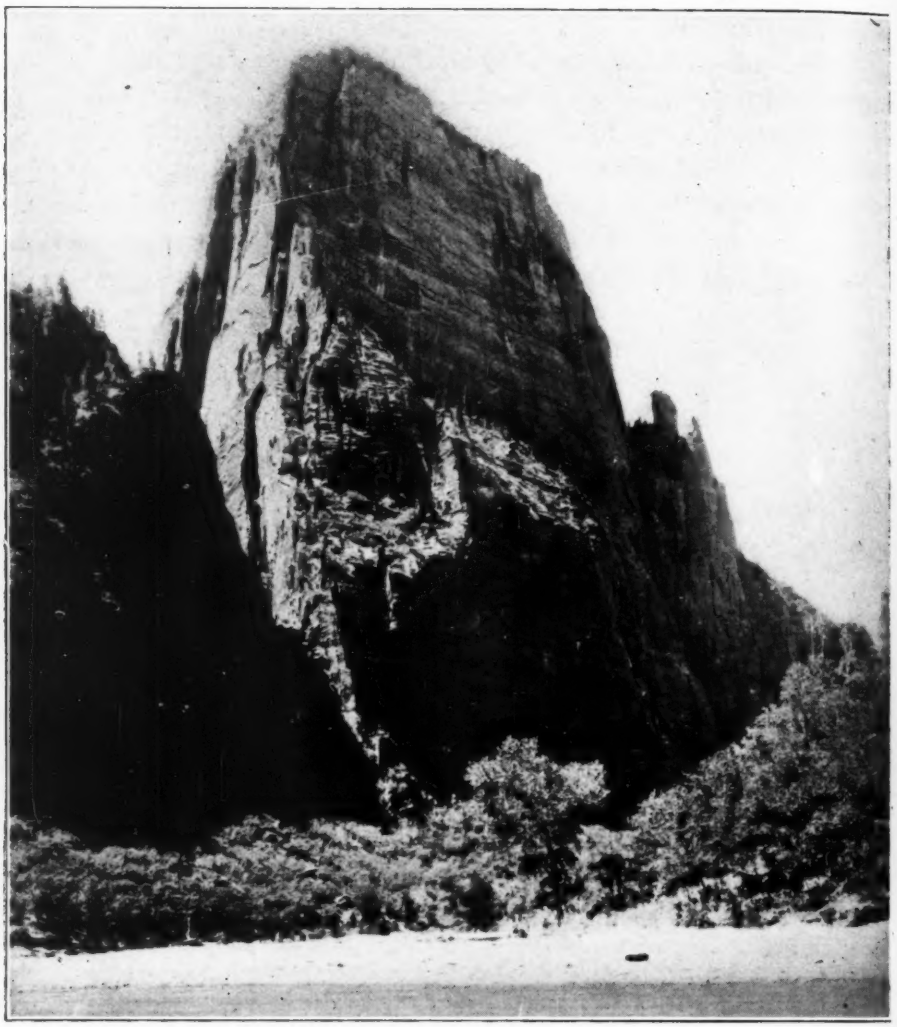

FIG. 4. El Gobernador, sometimes called the Great White Throne. This great white-capped monolith rises precipitously 3,000 feet above the floor of Zion Canyon about two miles north of the Wylie Camp. Photograph furnished by the Utah Photo Materials Company, Salt Lake City, Utah.

rich coloring continues. Two miles thru this part of the canyon (Fig. 5) with its lofty precipitous walls steadily coming closer and closer together brings one to the mouth of The Narrows.

From the mouth of The Narrows northward for two miles or more the canyon is almost unbelievably narrow from bottom to top, and from 1,500 to 2,000 or more feet deep. The stream occupies the whole bottom of the canyon, leaving no room for a trail except in the rushing water (Fig. 6). A portion of this remarkably narrow canyon is about 2,000 feet deep, only a few yards wide at the bottom, and a few rods wide at the top! In places a person, standing in the stream at the bottom of this unique portion of Zion Canyon and looking directly upward, cannot see the sky between its walls which actually interlock and overhang in a most amazing manner! The Narrows is perhaps the most remarkable rock slit in all the world.

FIG. 5 (at left). Looking south (down) the narrower portion of Zion Canyon between one and two miles below The Narrows. Depth, about 2,500 feet. Photograph by the author.

FIG. 6. In the lower portion of The Narrows of Zion Canyon where the rock walls are fully 2,000 feet high and only 30 to 40 feet apart at the bottom. Photograph by the author.

It should not be presumed, from the above descriptions, that all of the wonderful views at Zion Canyon are from its bottom. Scarcely anything has yet been done by way of trail building from the floor of the canyon to its rim, and it is possible to climb to the rim at very few places. A little north of El Gobernador a rather difficult trail several miles long leads to what is perhaps the grandest outlook point at the top of the canyon. From this point, about 3,000 feet

above the floor of the canyon, one can look southward straight thru the whole southern one-half of the glorious Zion. Nearly all of the grandest features of the canyon walls from El Gobernador south are plainly visible on a clear day. The very fine photograph reproduced (Fig. 7) to accompany this paper was taken from this lofty point on Zion's rim. Better than words, it will convey to the reader something of the grandeur of the scene.

FIG. 7. A general view looking about eight miles southward thru the southern and wider portion of Zion Canyon, from a point on its rim 3,000 feet above its floor; El Gobernador at the left, and Angel's Landing in the middle-right foreground. The rock is all sandstone. Photographed by the Putnam Studios, Los Angeles.

ORIGIN OF THE CANYON

Thus far our remarks regarding Zion Canyon have been wholly descriptive, but the interested reader most surely wishes to know how this wonderfully sculptured and colored deep canyon came to be as we behold it today. It has already been remarked that Zion Creek, which flows thru the canyon, is a tributary of the Virgin River, and that the canyon lies in the Colorado Plateau not far from its western border. In order to comprehend the origin and significance of Zion Canyon it is necessary to have in mind certain main features of the rocks, structure, and history of this local portion of the lofty

Colorado Plateau which covers many thousands of square miles of Utah, Colorado, Arizona, and New Mexico.

That portion of the Colorado Plateau in the general vicinity of Zion Canyon consists of great formations of practically horizontal wonderfully colored strata exhibiting a total visible thickness of thousands of feet. These strata are made up very largely of sandstones, most of which were deposited under water, but probably to some extent by the action of wind, in the original condition of sands.

After the vast pile of strata just described had accumulated, there was a profound uplift of the whole region. Under the influence of the weather and erosion (mainly stream-work) great bodies of the strata were removed, more rapidly toward the south than toward the north. Certain of the harder and more resistant formations stood out against the general process of erosion in the form of long, winding, conspicuous cliffs. This erosion left the country in the form of a great succession of very broad steps with younger and younger formations outcropping toward the northeast. The land was then much lower than it is today.

Relatively late in the present (Cenozoic) era an event of profound significance in the history of Zion Canyon took place. The broad, low-lying, terraced country was, geologically, rapidly hoisted fully 5,000 to 10,000 feet to about its present altitude, with a very pronounced slope downward toward the south and southwest. During the process of elevation of the wide terraced country there was renewed movement along an old north-south fracture (Hurricane Fault) in the earth's crust at the edge of the Colorado Plateau about eighteen miles west of Zion Canyon. The whole terraced country rose at least 2,000 feet higher on the east side of the fault than that on the west side, and this left the great so-called "Hurricane Cliff" which the Virgin River cuts thru near Toquerville, east of which village the road to Zion passes over the cliff (or rather steep slope).

It is now easy to understand how Zion Canyon came into existence. The great uplift of the once low-lying terraced country, with its resultant strong tilt downward toward the southwest, caused all the streams to become very swift, active agents of erosion. The master stream of the region was the Virgin River which took a steep course down the new slope and plunged over the Hurricane Cliff at the edge of the Colorado Plateau. At the Cliff the Virgin River proceeded to cut down its channel very rapidly, thus beginning the development of the present Virgin River Canyon. At first it was only a notch in the cliff, but steadily it became deeper and broader, and it increased

in length eastward for miles. Now, it so happened that Zion Creek was not only the largest tributary of the actively down-cutting Virgin River, but also it flowed (south) down the steepest slope of this part of the newly uplifted Colorado Plateau. The relatively large volume of water, combined with its great swiftness and the much higher general altitude of this part of the newly upraised land, enabled Zion Creek to cut its profound canyon deeper even than that of the Virgin River to which it is tributary. Zion Canyon is, therefore, a mighty gash which has been cut into the remarkably colored "Red Beds" strata by the erosive action of Zion Creek. It should be emphasized that the whole canyon development has taken place in very recent geologic time, that is since about the middle of the present era. Because the strata are practically horizontal, it is easy to understand why the red sandstone formation (2,000 feet thick) persists in the lower two-thirds of the canyon walls, while the white sandstone formation (1,000 feet thick) persists in the upper one-third.

Before the canyon cutting, the great sandstone formations were solid masses across the space now occupied by the canyon. The great depth of the canyon is entirely the result of the down-cutting (erosive) action of Zion Creek. The very swift stream, heavy-laden with particles of mud, grains of sand, and pebbles at times of flood, has, for hundreds of thousands of years of the most recent geological time, been acting somewhat on the principle of a rasp or flexible saw cutting or grinding its way down into the bed rock, at the same time, by the aid of its tributaries, developing an ever widening and deepening trench or canyon The rock fragments of all sizes, derived from the crumbling of the rocks under the action of the weather have been the tools with which the stream has accomplished the wearing down of its channel. While the down-cutting has been in progress, the steep canyon walls, especially toward the top, have gradually been crumbling under the action of the weather and the short tributaries of Zion Creek have cut deep recesses into them. Thus the short side canyons have developed; the canyon has been widened across the top; and its walls have been made irregular.

Since the main part of the canyon has attained approximately its present depth, the velocity of the stream has been much diminished and its power to saw down its channel has, therefore, been notably lessened. But Zion Creek, like all other streams under such conditions, has been swinging in curving sweeps of currents slowly back and forth from one side of its valley to the other cutting into the walls and tending to undermine them first on one side and then the other.

Due to the shifting currents every part of the base of each wall of the canyon has been more or less cut back. Thus the floor of the main part of the canyon has been widened. Zion Canyon is widest in its lower (southern) portion because it was there first cut down to a great depth, and the processes of valley widening have there been longest at work. The middle portion of the canyon is distinctly narrower, while the very remarkable, exceedingly narrow, upper (northern) portion is the youngest where the down-cutting is still very vigorously in progress and the processes of widening have scarcely begun.

TEACHING THE GEOGRAPHY OF A STATE*

MENDEL E. BRANOM
Harris Teachers College, St. Louis, Mo.

RELATION OF THE STATE SUPPLEMENT TO THE BASIC BOOK

The state supplement, as its name implies, is supplementary to the basic book. The content of the basic book has been organized without reference to the supplement. The basic book may be studied independently of the supplement. The supplement holds much the same relation to the rest of the book that the appendix holds to the rest of the body. In either case the appendix can be removed without serious loss to the major body. The supplement is an after-thought. It is bound separately or placed incidentally in the back of the text-book.

STATE SUPPLEMENT RELATED TO THE SECOND BOOK

The authors and publishers of geographic textbooks have attempted to select and organize geography materials that will be found equally useful in all parts of the United States. Such an organization necessarily places slight emphasis on any particular community or state. A demand has arisen that pupils shall make a special study of the geography of the state in which they live. The state supplement is an attempt to meet this demand at a minimum expense. A detailed knowledge of state geography can be secured more readily by the pupils of the upper grades. Since the need for knowledge rather than the demand of method has determined the introduction of the supplement, the material has been selected with grammar grade pupils in mind. The supplement is almost invariably bound with the second book.

* Presented at the Ann Arbor meeting of the National Council of Geography Teachers, December 26, 1922.

PLACE OF GEOGRAPHY IN AN ELEMENTARY COURSE OF STUDY

State geography is an essential part of a well-organized course of study. Authors, publishers, and teachers have generally sidestepped the problem of placing this material in a course of study. The state supplement is generally studied either in connection with the larger unit of which it forms a part or as a separate distinct unit. There may be no formal recognition of a separate organization of state geography, but merely incidental reference to it in connection with the larger unit of which the state forms a part. For example, Missouri may be taught in connection with a study of the North Central States or in connection with the study of the natural regions which include parts of Missouri. The dominant purpose is not to teach the geography of Missouri but the geography of the larger region. The state supplement may be used to enrich the treatment in the basic book so that the pupil will have a more detailed knowledge of his own state than of other states or parts of natural regions outside of Missouri. The geography of a state may be separately treated with the help of a state supplement. The dominant idea is to teach the geography of the state, and all larger political divisions or natural regions are strictly subordinated to this dominant purpose.

Teachers, in general, are guided to a greater extent by the definite organization of the textbook than by an outline course of study which provides no definitely organized content. The content and organization of a textbook exert a greater influence in determining the quality of work than teachers like to admit. Since the state supplement is apart from the basic book it is probable that the common way of teaching state geography is as a separate unit.

PLACE STATE GEOGRAPHY SHOULD HOLD

State geography should be stressed both in the upper and the lower grades. This work should be interwoven as an inherent part of the course of study. In the lower grades type studies and journey geography should be emphasized as a part of the gradual unfolding of the world as a whole. The state should be surveyed with reference to its particular and characteristic activities and features. The topics selected for study should be of such a nature that they can be organized on a unit plan as recognized in the out-of-school world.

The upper grade work should involve a study of the natural regions of the state and the building up of a comprehensive concept of the state as a whole with its complex interacting relationships. In most instances, the state material should be studied at the beginning of type

study and journey geography work, and also at the beginning of the intensive regional studies of the upper grades.

CONTENT OF STATE GEOGRAPHY

Missouri may be taken as a type to illustrate the content that may be selected. An attempt has been made to recognize units of work that may be organized according to the out-of-school organizations. The child becomes acquainted with the relations of the rural people to their environment thru studying the following units: a truck farm, a fruit orchard, a dairy farm, a grain farm, a stock farm, a lowland farm, and a village. He becomes acquainted with three types of mining communities. The products of these communities are lead, zinc, and coal. He studies a lumber camp, a waterpower site, and a recreational camp. He studies one of the larger cities, as St. Louis, Kansas City, or St. Joseph. He studies a transporting line as a means of relating the various parts of Missouri in which these type activities are carried on.

The course of study for Missouri for the upper grades is organized from a somewhat different viewpoint. The topics under which the geography of Missouri is discussed are as follows:

(1) Historic Geography
- How the Indians lived
- How the French came to exert an influence in the Missouri Region
- How the French lived
- How the American pioneers came to exert an influence in the Missouri Region
- How the American pioneers lived

(2) The natural regions of Missouri
- How Missouri came to be divided into natural regions
- The prairie section
- The Ozark region
- The southeast lowland

(3) Missouri as a whole

TEACHING THE CONTENT IN THE LOWER GRADES

The mere organization of the lower grade work on a unit basis as recognized in the out-of-school world does not insure superior teaching. The pupils may regard these objective projects in much the same way that the disgruntled farmer may regard his farm. They may handle the projects in a rather perfunctory fashion so as to meet the requirements of the teacher, but they may have little direct

interest in the work. The function of the teacher is to make the objective project subjective. The teacher is not satisfied if the pupils do the work merely because of indirect values, as grades, or the approval of the teacher. She is primarily interested in bringing the child into contact with situations that arouse his interest and whole-hearted endeavor. She prefers the organization of the subject matter into natural objective projects because of the probability that the pupil will become more deeply interested in the work than he will become if the work is organized into artificial units which serve no direct useful social purpose.

What does the teacher do with the units of study suggested for the lower grades? She begins with the neighborhood of the child. If the school is located in a city, the pupils construct a floor or sand table project of the neighborhood. They next reproduce in a miniature way the more general features of the city as a whole. The children recall the food products with which they are acquainted and the teacher relates this knowledge to the areas of production. The class proceeds easily, naturally, and relatedly from one type of farm to another type. The children are encouraged to collect and to construct. Their inherent curiosity is utilized. When the neighborhood project is completed, the child has a laudable pride in the result. He wants to show it to others.

A more compelling and comprehensive purpose of holding a harvest festival may develop. The pupils may prepare their miniature types of farms. They may collect typical specimens of each type. In some convenient way they may indicate the service that these farms render in the city. Other groups of children or the parents and patrons of the school may visit them during the harvest festival. The pupils are in charge. They are eager to explain. They are not merely informed concerning the concrete materials on display. They have delved beneath the surface and in connection with each exhibit, they have worked out many problems.

TEACHING THE CONTENT IN THE UPPER GRADES

In the upper grades the teacher attempts to hold to this same guiding principle that the content should be organized in its natural setting as determined by society. The pupils become members of the "State Board of Agriculture," and study the agricultural products of the state; they become members of the "State Geological Survey" and study the mineral resources of the state; they become members of the "State Department of Labor" and study the industrial activities of the cities.

They become members of the "State Commerce Commission" and study the railroads; they become members of the "State Highway Commission" and study the highways of the state.

In the upper grade work less dependence is placed on the sand table and miniature reproductions. The pupils are able to handle symbols of a more abstract nature. They construct maps, diagrams, sketches, tables of statistics, grafs, outlines, bibliographies, and compositions. The human rather than the physical approach to the study of a topic is preferred. A study of the relations of the early settlers to the resources of the Missouri Region enables the pupil to understand how the interacting relations of man and nature have prepared for modern relations. While emphasis is placed on that part of a natural region that is in Missouri, the pupil is led to appreciate the fact that the political boundaries of the state and the boundaries of the natural regions do not coincide. After the pupil has completed the study of the natural regions of the state, the advantage of organizing systematically the geography of the state as a whole is pointed out to him. The systematic outline suggested is as follows: location, area, boundaries, relief, climate, drainage, soils, natural regions, plants and animals, primitive life, civilized people, the farms, the forests, the mines, manufacturing, transportation, the cities, recreation, education, and the future outlook.

The pupil, thru the topical outline, reviews in a new view, that is, reorganizes from a different viewpoint, the details that he has mastered. The pupil has not begun his study of the state with this topical outline. Thru a consideration of vital problems and exercises he has come into a knowledge of many facts concerning the state. In many instances the same fact has been used a number of times in relation to different organizing centers. The pupil should move thru problems and exercises to classified knowledge. Classified knowledge becomes necessary because the pupil has something to classify.

APPEAL FOR IMPROVING THE SITUATION

State geography is not rendering the service in the classroom that it should render. The fault lies largely in the fact that no serious attempt has been made to find a place in the course of study for it. We should no longer tolerate a topical outline of descriptions and enumerations. Vital geographic material of the state should be selected and organized for the pupils of the grades. The geography of a state should not be incorporated in a mere supplement added as an afterthought to meet certain requirements.

The speaker has told of attempts that are being made in Missouri. No doubt similar attempts are being made in other states. Let us compare notes, and work shoulder to shoulder in an attempt to find the right place not for the state supplement, but for the geography of a state. This place will be found if we will hold in mind (1) that the state material is to be selected on psychological and not merely civic grounds, and (2) that the state material should perform an important function in a unified course of study.

THE NEW GEOGRAPHY AND NEWSPAPER CLIPPINGS

EMMA F. WEST

Agassiz School, Jamaica Plain, Mass.

The world was never so small as it is today—a unit so to speak. Fast steamers, limited trains, airships, all tend toward unifying the globe, thus bringing even the remotest nation into close proximity with the United States, while the telegraph, the telephone, the cable, and the wireless penetrate to the farthest confines of the earth. And so, geography teaching has passed thru an evolution, or is passing thru such a state, for the end has not yet been reached. Out of this evolution, geography is emerging, democratic, alive, broad in its content, and a general awakening of interest in it is now taking place. The newspapers contain a vast amount of information upon this live geography, for the duty of the newspaper is to supply the information which the public demands, and this knowledge the schools may well appropriate. In short, periodicals offer much geographical matter of a political, commercial, and economic type, and every pupil, rich or poor, can obtain that information at almost no expense.

The pupils of today will make the business men and women of tomorrow, and they will have business relations, not only with the people of the United States, but with those of all foreign nations. Modern inventions bring us to the very doors of foreign nations. Therefore, the broader the outlook in geography the future citizen obtains, the better equipped will he be to conduct the big business for which America stands, for a knowledge of geography is recognized as a necessary asset of the successful business man. He who can conduct his business a little better than his predecessor is an acknowledged leader. We have greater natural resources than any other country in the world, and to this may be added the initiative to make the most of those great natural resources. Hence, other nations are looking to the United States as the supply-house for food and manufactured products.

SYMPATHETIC INTEREST IN THE PEOPLE OF OTHER COUNTRIES

Humanistic geography is in the ascendancy. A few months ago, one of our periodicals pointed to the rapid changes that are taking place—changes in science, in education, in government. Formerly, civilized nations directed their energies to solving the relation of God to man. In later centuries, peoples minds dwelt on the relation of man to God. Now, as we enter on the new era, man's problem is how to live peaceably one with another—the relation of man to man. Therefore, as teachers, we should strive to create in the pupil's mind sympathy towards all other nations of the world; learn to understand the people of the different countries from their own standpoint with emphasis on the last few words—*their own standpoint.* Teachers have great opportunities to kindle and spread this feeling of sympathy, for have we not in our midst representatives of many foreign nations? No city is without them. In our school rooms, English, French, German, Italian, Poles, and many other nationalities receive the same teaching from the same book.

The newspapers of the present day offer much material on this subject, for example, the recent World's Disarmament Conference in the City of Washington, the sufferings of the Russians, and the Armenians freed from Turkish rule by the Allies. These and many similar subjects fill the minds of the people in leading nations of the world. The Conference assembled leaders seeking means by which peace may come to the world—the relation of man to man.

"From their own standpoint" reveals a broad field for study. It is said that the reason for the slow increase in our South American commerce is the failure to recognize merit in the viewpoint of the people of Brazil, Argentina, Chile, Peru, and other countries. The European meets the business man of South America in his own environment. They partake of a dinner, and smoke and converse without regard to the lapse of time. This is South America's business method. On the contrary, the merchant from the States, with his case of samples and his quick and hurried manner, tries the direct method of trading, or, perhaps, he writes a letter stating prices briefly and not as courteously as he might. We find ourselves the loser, as this does not appeal to the people of South America, while our European neighbor caters to their tastes and habits and wins out—psychology of business.

THE HUMANISTIC ASPECT

The new geography deals directly with the people. From them it reaches out to the environment and the cause and effect of that

environment. This leads to the study of their government, their economic conditions, their commercial relations with other countries and the physical conditions of their country. The Disarmament Conference at the City of Washington may serve as an illustration as the newspapers dealt with it fully. The pupils may be greatly interested in humanistic geography from the newspaper clippings. Among the things which they wish to know may be mentioned the following:

1. Where is the city of Washington?
2. What is a conference?
3. Why do the delegates meet there?
4. What nations have sent delegates?
5. What is meant by "Disarmament"?
6. What do we hope to gain?
   a. Good will towards other nations
   b. Peace for at least ten years
   c. Probably no war in our generation
   d. No naval rivalry between the United States and England
   e. No Anglo-Japanese alliance
   f. No trouble between the United States and Japan
   g. Many differences between Japan and China settled
   h. Open door to commerce and industries

Many more topics of the day of a similar nature, taken from the newspapers, afford subject matter for humanistic geography. The freedom given Egypt opens up a whole train of thoughts on "Unrest in India," "Mohammedanism," "The Sultan's Return to Europe," and "Afflicted Armenia."

PRACTICAL GEOGRAPHY

The newspaper gives rise to practical work in geography. Present geography, that which is taking place in the world today, should be amplified and intensified by a study of the past and the outcome of the future. Never hesitate to teach history in the geography lesson when the subject matter demands it. Current geography aids in unfolding the problems of civilization, the solving of which tends to produce a better human race, and to inculcate therein a higher grade of inherent qualities; a race trained to do its part in a great sympathetic movement. Practical geography gives the pupil a broad outlook into the daily life of the common people and the newspaper stands for that life. Twentieth century geography is not a mere conning book. It aims towards geographical growth. It aims to develop the best that is in every child—morally, mentally, and physically—and thus to make the world a better place in which to live.

NEWSPAPER MATERIAL BROUGHT IN BY THE CLASS

Most of the dailies issue picture sheets on current topics of the day as well as pictures scattered thruout the pages of the issue. The pupils

may bring these pictures to the class. Those that do not pertain to the subject matter for the day may be placed in envelopes for future use. At one school the pupils brought the following pictures in one day:

Coast Guard Cutter Bound for the Ice Fields
Illinois Coal Miners
Pickets at the Lawrence Mills
Women Textile Workers in Lawrence
Miners at Scranton, Pennsylvania
Strikers of the Pacific Mills at Lawrence
How the Operators prepared for the Big Strike
View of the Charlestown Navy Yard and Bunker Hill Monument
An advertisement of stores with a huge sign "Closed" on each

The "Shipping News" is especially valuable as water routes may be traced, exports and imports listed and ports located. Even the stock exchange column teaches about minerals, railroads, etc. One newspaper prints a European page; data concerning steamship lines are plentiful; while many an interesting story of "why" lies hidden in the advertisements.

How to Use Newspaper Clippings

If the class is large, let each pupil read the headings of the clippings he has brought. He should be prepared to ask several worthwhile questions on the topics in hand. In this way, all who wish may participate in the exercise. If time lacks, let each read one item or call upon two rows one day, two the next, etc., until each pupil has had his chance. Another method is to have the pupil give in his own words a description of the article—a two minute recitation. Pictures may be passed from pupil to pupil, without comment, later calling on one or more to talk about them; or, one pupil may describe the picture and then allow it to be passed. Pupils always enjoy pasting. Have the class make individual scrap books as well as a larger one for the class. The latter should contain the more valuable and lasting items thus making them available for use the next year.

The Socialized Recitation

The pupil steps to the front of the room and proceeds to read the title of his clipping. As he continues to read, he asks questions pertaining to the subject matter—location of cities, the why and the wherefore. It is surprising what intelligent questions children learn to ask.

The following proved a very valuable half hour in geography. A pupil read an article concerning the stone cutters' strike. This

resulted in a lesson on building stone in New England. The first question gave rise to the study of the centres for quarrying as the granite quarries at Rockport, Maine; the White Mountains; granite at Barre, Vt.; marble at Rutland, Vt.; gray granite at Quincy, Mass., used for curbstones, gateways, foundations for buildings, and trimmings for buildings, monuments, etc.

Rockport, Maine, as well as Rockport, Mass., can send granite by sea more cheaply. Almost all these granite centres are connected by rail with the larger cities, such as Portland, Rockland, Burlington and Boston. Nearness to the large markets and good transportation facilities make quarrying in New England worth while.

SHIPPING NEWS

One column of "Shipping News" or "Along the Water Front" often suffices for a whole week's geography lesson. They contain valuable up-to-date information. For example: "Fresh groundfish was in better supply at the Fish Pier yesterday. Eight vessels came in with halibut, cod, flounders, haddock, cusk and pollock." Here is a fertile field for teacher and pupils; Grand Banks, their location, formation, and who owns them and why; path of Greenland icebergs, their formation and their work; Labrador fisherman, Dr. Grenfell; why fishing vessels come to Boston and rating of Boston as a fishing port; Gloucester; Grimsby; exportation of fish to European countries; migratory fish such as mackerel, swordfish, bluefish; fish that are constant as cod, halibut, flounders.

The same column of "Shipping News" reads:

"The largest consignment of Brazilian coffee to be sent to Boston since direct shipments have been resumed is now on the way in the hold of the Shipping Board steamer *West Keene* which sailed from Santos on February 13, and is due March 5. She is bringing 21,100 bags of coffee containing 2,785,200 pounds." When encouraged to do so, pupils naturally ask questions and surprisingly good questions too. The thinking child would probably wish to know:

What is a consignment of coffee?
From what countries does coffee come?
How does it grow?
What is a direct shipment?
Where is Santos?
The route followed by the *West Keene* from Santos to Boston and how long it takes to make the voyage
Does Boston use all of the 2,785,200 pounds of coffee?

COMMERCIAL GEOGRAPHY

During the World War, certain phases of geography became an unknown quantity, and the teacher of geography became bewildered and scarcely knew what to teach or how to teach it. Immediately after the war came new textbooks making the path to learning somewhat easier and less crooked; but even now, geography is in the transition stage. Because of this condition the newspaper is especially valuable in these times of fluctuation in trade. Commerce is in a state of unrest and must be for some time to come. Even in its most stable days, commerce changed from month to month and from year to year so that geography textbooks did not give all the information desired. Then, now, and always, what gives more useful, up-to-date geographical knowledge to the masses of pupils than newspaper items?

CITIZENSHIP

Geography trains for citizenship. We, then, must seek for the truth about ourselves and our world neighbors. What truths should we seek? We should know how others live and what they do because of their environment. Much misunderstanding arises in our commercial relations with the people of other countries because we do not understand our neighbors' habits, their customs, and their natural physical environment. As the business man reads the papers and the magazines for the news of the day in order to keep in touch with what the world is striving for, so the pupil—the future citizen—should learn to cull from his daily readings the best thoughts and aims of the world and thus secure a broad outlook internationally. He should seek to know what each nation has contributed for the good of the world, and what the present and future aims of these nations are. The newspapers furnish this information. Today, geography is not so much a memory exercise as it is a habit forming exercise, a training for future citizenship; and the teacher should aim to foster this training by developing a sympathetic attitude towards all nations.

SUMMARY

Newspaper clippings should serve as a means to the end, and as such, the teacher should use them. The world is still the home of man and man still adapts himself to his environment, but the new geography deals more with the people, with stage settings of physical geography, mathematical geography, and economic geography. The aim of the new geography is to create a sympathetic understanding of other nations, in fact, to know them from their own standpoint.

Newspaper clippings aim to create interest. The pupil hears current events discussed at home, making the school geography more real. It becomes a live issue, something worth while. Interest is aroused in the textbook, maps, and other illustrations. After a clipping has been discussed, when the teacher says, "What does the textbook say about this?" the pupil enters into its study with vim rather than the old listless attitude.

Newspaper clippings provide greater scope in teaching. The adult reads promiscuously, now, about Egypt, and now about India. It is the business man's way of getting quick information. The pupil's aim is to get a workable knowledge of geography by the time he leaves school, and a workable knowledge is obtained by understanding how to interpret geographically. Therefore, the newspapers serve as "first aid." It is one thing to read the newspapers and another thing to read them most understandingly. The interest fostered by reading the clippings will prove profitable in later years. The child must be interested and newspaper clippings are the stepping stones.

Aim, then, to teach geography in a broad sense. Let it be a world wide teaching, a democratic teaching, a sympathetic teaching. As the vice-president of a large corporation expresses it, "We must think internationally," so as a teacher I say, "Teach internationally."

THE CHANGING ESKIMO*

An Editorial

A. E. PARKINS

George Peabody College for Teachers, Nashville, Tenn.

In recent years we have read with considerable satisfaction of the changing Chinese, changing under the influence of railroads, telegraph, postal systems, commerce, schools and colleges, and travel. The railroad invasion of many of the sections of the Southern Appalachian Highland has resulted in changes in the economic and social conditions in these regions. Now, man in another section of the world, long noted for its cultural stagnation and unprogressiveness, under the invasion of missionaries and traders is receiving the blessings(?) of civilization.

*The facts set forth in this article were gleaned from the books and magazine articles of Stefansson and the various members of his party, particularly Stefansson: "The Friendly Arctic," and "My Life with the Eskimo." The illustrations are from the first named book and are used by courtesy of the publishers—The Macmillan Co., N. Y.—*Editor.*

WHITE MAN'S INFLUENCE ON THE ESKIMO

The Eskimos on most parts of the coast of southern Greenland have been under the influence of the Danes for centuries. For the last thirty or forty years the Alaska Eskimo has been in contact with whalers, traders, and missionaries. On the coast of Labrador and the shores of Hudson Bay the Hudson's Bay Company has long had posts. The McKenzie Delta Eskimo has likewise been influenced by the arm of the law of the Northwest Mounted Police, the traders, and the missionaries, and in recent years the Hudson's Bay Company. It was only along the shores of Coronation Gulf, Dolphin and Union Straits, and the coasts of Victoria Island that Stefansson and his party in 1908 found Eskimos, the Copper Eskimo, few of whom had seen white men except for an occasional trip on the part of a venturesome few to a distant trading post. But even this section is now invaded, and it will be only a question of a few years before all the Eskimos of the Arctic coast will be Christianized and will begin to take on the ways of the white man—a change, which, in the opinion of many who know the Eskimo in his native habitat, responding in the way nature dictates, is on the whole for the worse rather than for the better.

In adopting the white man's house the Eskimo has abandoned a home that was comfortable tho small and that cost little to build. Now often lumber has to be imported long distances. Only a thin wall separates him from the cold; the scanty amount of drift wood is rapidly being depleted; and to keep out the cold every chink and even the keyhole is closed. In the early days the dirt that naturally accumulated during the winter season was abandoned in the spring when a new home was sought; but now the dirt and filth accumulates from year to year, making conditions exceedingly unhealthy. The fur trader has induced the native to trap for skins and with these skins to buy the necessities of life. This means an over-exploitation of the animal resources. The Eskimo now kills for furs rather than for meat, clothing, and shelter. Game is becoming very scarce in the northern portion of Alaska. The whaler has reduced the number of whale so that drift whale are much more uncommon than formerly. To prevent complete extinction of the Eskimo in Alaska the United States government has introduced the reindeer, but the Eskimo is a hunter and fisher and not a pastoralist. Therefore, the pastoral industry has to be taught him before he can adopt the reindeer as a basis for his economic existence.

FIG. 1. A herd of reindeer in Alaska. Millions of these animals may be raised on the Arctic slopes of North America.

The arts which have been developed to a high degree, based on the meagre resources of the local region, are now being abandoned, and iron is replacing stone. Iron and steel harpoons, spears, and guns are replacing the home made spears and the bow and arrow; the iron pot is taking the place of the stone. The white man's sleds are taking the place of the ingenuous contrivance made by the Eskimo. Tools, axes, saws, knives, files, and scissors of steel are now found in every household in Alaska and the Hudson Bay region. The old tools, the snow shovel, bowed drill, curved whittling knife, the woman's knife, and the skin scrapers are being replaced by utensils of iron. Even the sewing maching has made its invasion. The warm skins are being replaced by dresses of calico, by overcoats, coats, woolen hose, vests, and felt and leather boots. Indeed, in most portions of Alaska very little of outward culture differentiates the Eskimo from the white. All along the coast in the section that is becoming civilized the population is being greatly reduced by migration and death. The whalers brought measles, tuberculosis, and venereal diseases.

The old feeling of equality is passing. Before the whites came there was true equality. Food was in common. Even the leaders were on the level with others. Public opinion ruled. In the earlier days there was much visiting during the long season of darkness. Groups traveled a hundred or more miles to dance and to trade. Large dance houses were erected where festivities were carried on for days. Now in the winter two or three families go off alone. The dance house has vanished, and differentation in wealth is apparent. Stefansson reports that in 1913 one Eskimo, Tokpuk by name, owned a thousand reindeer and was worth undoubtedly $25,000. He is becoming a Morgan, a Carnegie, or a Rockefeller in the Eskimo world, and there are several of his sort in Alaska.

Adopting the white man's religion is in most cases simply adding to the amount of superstition that permeates his life. A religion, developed in a semi-arid pastoral environment, is not at all fitted to a native of Arctic lands.

The whalers were the first to bring white man's ways, food, and clothing to the Eskimo. The first whale ship, according to Stefansson, reached Circle Island in 1889. The Eskimos got to buying provisions from the whalers. The whalers needed fresh meat to prevent scurvy, and this was obtained from the Eskimo, and flour, molasses, sugar, canned meat, canned vegetables, butter, and other luxuries were given in exchange. From them the Eskimos also got to purchasing clothing and utensils.

THE COPPER ESKIMO

It was only in the Coronation Bay region between the McKenzie Delta and Hudson Bay, as previously stated, that Stefansson found the unchanged Eskimo, the Copper Eskimo. Here he lived in villages, varying considerably in size from only a few snow huts to as many as a score or more. One village that Stefansson visited on the ice on Prince Albert Sound, the largest village he found, numbered about twenty-seven houses with a total population of something like one hundred fifty people. The houses varied very greatly in size, somewhat in shape and in the number of occupants. Some of the houses contained as many as nine persons. As a rule the Eskimo houses are small, because small houses are easy to heat and heating and lighting is done entirely by oil lamps. The largest snow house that was seen by Stefansson was about thirty feet across. This was an assembling place and could hold fully one hundred people. The highest point in the central dome was about ten to twelve feet above the floor. There were two bed platforms, each approximately ten by eight feet.

There is always much variation in the arrangement of the house. Some houses have single domes, some two or three. There is usually but one entrance. Some have alleyways six or seven feet wide and eight to twenty feet long, the door at the outer end being four to five feet high and two and one-half to three feet wide, but the entrance to the house proper is always so low that entrance is made on hands and knees. The upper edge of this small entrance is always placed a few inches below the lower edge of the bed platforms. A hole is left in the dome for the exit of the heated air and fumes and smoke. The size of this is varied from time to time, depending upon the outside temperature. A window of translucent lake ice is quite often set in the dome. Contrary to the opinion held by some people, the temperature inside of the house is always high. Eighty and even ninety degrees are not uncommon. These, of course, are the winter homes. They can be made in the course of an hour or two, and when a visitor comes to an Eskimo village a home is quite often built to his order.

Newcomers are always welcome when the village dwellers are assured of their kindly intent. In approaching a village, Stefansson tells us in describing his visit to Prince Albert Sound, the visitor usually holds up both hands to assure the villagers that he has no knife in his hands. This shows his visit of friendly import, but then he might be a spirit. To test this, he is made to swallow small chunks of blubber. If this is done to the satisfaction of the villagers he is

more than welcome. A house is prepared for him; food is brought; and the house made comfortable. At every meal food is sent from nearly every house in the village.

The Eskimo is a nomad, not so much perhaps as the nomads of the Sahara, Arabia, and Central Asia, but both spring and fall he moves and he may move his winter or summer dwelling.

The food of the Copper Eskimo is flesh almost entirely. A few gather berries in late summer, but seals, caribou meat, bear meat, fish, and sometimes whale, and other kinds of flesh are eaten for months at a time.

FIG. 2. A summer cache, Copper Eskimos

In the late fall, when the seas and bays freeze over, the Eskimos move to the ice, and build their villages where the snow is sufficiently deep to furnish blocks for the houses and where there are freshly frozen leads (open spaces in the ice), for the distribution of the seal is determined by the thickness of the ice. The seal must have air from the atmosphere, being a land animal which has gone down to the sea. In the warmer months of the year the seal is often found on the edges of the cakes of ice, lying basking in the sun. Seal hunting at this time is very difficult and very rarely practiced by the Copper Eskimo. The catching of a seal at this time, as practiced by the

Alaska Eskimos, often required several hours, for the hunter must crawl on the ice, imitating the movements of a crawling seal, to within shooting distance of the seal and shoot it thru the head or heart while it lies asleep. In winter the seal is taken thru holes in the ice. As winter approaches and ice begins to form, each seal has several holes or breathing places which it visits from time to time and opens by gnawing. It therefore keeps the ice at these holes gnawed away about as rapidly as it freezes. These breathing holes are often covered with snow in the winter-time and difficult to detect by the hunter, but the Eskimo dog with its sharp sense of smell locates them readily and the hunter, with spear in hand, takes his place beside the hole awaiting the coming of the seal. The vigil often lasts several hours. Some hunters drive a small one-tined spear thru the thin ice so that the lower end of the spear projects some three or four inches below the ice into the water. When the seal comes to the breathing space or hole to begin his gnawing, his nose moves the spear and the hunter strikes with his harpoon. Usually two or three hunters work together, because some of the seals are so large that they cannot be brought to the surface of the ice by one man. The booty is always divided among the representatives of the families of the village. Each representative comes and selects his piece. The most influential persons of the group select the larger pieces, and the hunters take the leavings. It is a superstition that a hunter who refuses to divide his booty is likely to have some dire thing happen to him. One old Eskimo, Stefansson tells us, who was blind believed that blindness was brought on by refusing to divide a seal which he had taken alone.

Polar bears may be caught in the winter time, and some of the Eskimo tribes live for several months on polar bear meat. Caribous also are often trapped in the fall and spring within sight of the snow villages on the ice, but hunting at this time is very difficult with the low range instruments of the hunt, the bow and arrow, that the Eskimo possesses. With a rifle, however, caribou meat could be secured readily at this time. Boiled seal meat and often uncooked blubber form the food three times a day for many months in the winter season. In the springtime the blubber is put in large sealskin bags for future use, some of them holding as many as three hundred pounds, each family possessing from three to five or more of these bags.

In the springtime when the summer sun returns and the ice begins to break up, the Copper Eskimos moved southward to the land. Some of them go as far south as Great Bear Lake to hunt caribou. The

caribou during summer furnishes not only food for immediate use but much flesh is dried to carry the Eskimo over to the winter sealing time, and in the latter part of the summer when the hides are the best, material for clothing and for tents is secured. In the early summer grubs of the bot-fly bore holes thru the skin of the caribou, and hides taken at this time are not suited to such uses. In their summer sojourn tent poles are also secured and much wood for sleds and for handles of spears is obtained.

Each family in general supplies its own wants, but there is some trading going on. Steatite for the making of lamps, pyrite for the striking of fire, copper and iron for the tips of spears and harpoons, and wood for tent poles and spear handles are often given in barter. Most of the copper and iron in possession of the Copper Eskimos in 1908 had come from wrecks of Arctic explorers and traders. Families who make the long journey to the Hudson's Bay Company's posts often return with articles for trade.

From the description that we often read one is likely to get the impression that the Eskimos are all alike. Stefansson found individual differences as well as group differences. In some groups there are certain families that travel widely. Stefansson found that among the Eskimos of Prince Albert Sound some families had traveled several hundred miles to trading posts on Hudson Bay. Others travel from one hunting ground to another, going long distances. The groups are never permanent. Families will often draw off and join with other groups that are nearby, or may depart on long journeys to secure wood, stone, metals, hides, and other equipment. Within a single group one will find prosperous Eskimos and Eskimos almost on the verge of starvation, but, of course, communism always protects the latter. The more prosperous are better clothed, better behaved, have more implements, and are more intellegent, the latter a cause of the prosperity.

Altho life is a struggle for existence and its preservation keeps the Eskimo fairly busy, he has plenty of time for recreation and entertainment. At times the food supply is scarce. At times large numbers may die of starvation. Yet in proportion, it is certain that the Eskimos are not as bad off as thousands in our densely populated cities in even prosperous America. Food is plentiful most of the year, and Stefansson and his party have clearly demonstrated that a white man can live in the Arctic if he possesses a knowledge of the habits of the wild animals there and lives the life of the Eskimo. He states that he is confident and has demonstrated by experience that a white man,

supplied with guns, ammunition, and other means of hunting and fishing, can live indefinitely in Arctic lands and with no more equipment than can be drawn on a dog sled, and can live more securely than the Eskimo for his superior intelligence yields him results when the Eskimo with his great mass of traditions and superstitions in hunting would go hungry.

THE ARCTIC REGIONS

The Arctic lands are not those desolate regions we have been accustomed to think of. It is true that there are few trees. Spruce trees are found in large numbers on the Coppermine River within

FIG. 3. A summer camp of the Copper Eskimos on the Arctic prairie

twenty miles of the Arctic coast, with a few stragglers only five or ten miles from the coast. Willows from ten to fifteen feet high grow in many places in river valleys far north of the traditional tree line. On the McKenzie Delta spruce of fair size grows one hundred fifty miles north of the Arctic Circle even to tide water. Great Bear Lake is fringed by forests. Dietz River Valley is well covered for many miles northward, and not far from Dismal Lake spruce timber was found to be four and one-half feet in circumference, five feet from the ground. Of course, there are no large stretches of timber. Most of the land on the Arctic coast of Canada looks like a vast prairie,

FIG. 4. Hundreds of species of flowering plants and dozens of species of moths and butterflies are found on the most northerly islands.

FIG. 5. A meadow and flowers of the cotton plant on Herschel Island

resembling in many respects the prairies of the Dakotas, Montana, and Nebraska. An American botanist, Dr. Ekblaw, collected one hundred twenty flowering species several hundred miles north of the Arctic circle and Sir Clements Markham is an authority who claims that botanists have identified seven hundred fifty-two species of flowering plants, three hundred thirty-two species of mosses, two hundred fifty of lichens, and twenty-eight ferns. Ernest Thompson Seton calls the Barren Grounds the "Arctic Prairies."

One explorer described the conditions near the northern part of Greenland as follows: "We had expected to find a very desolate country when we came down from the inland ice but we were agreeably surprised to find a vegetation so luxuriant that we had seen nothing like it north of 'Danmark's Havn.' There were large tracts of thick moss, several species of grasses that formed tracts that looked like meadows. The slopes were covered with moss, grass, heather, and willows."

There is likewise an abundance of animal life. Indeed, in most sections of Alaska except along the northern coast, game is very plentiful. There are herds of caribou that number tens of thousands. Stefansson saw one herd that undoubtedly numbered more than a half million in its southward march toward Great Bear Lake. In the early part of the summer of 1916 a member of Stefansson's party and eight Eskimos killed ninety musk-ox, thirty seals, several bears, and a few reindeer. In the latter part of the summer they killed for clothing sixty reindeer, and more than fifty musk-ox. In seventeen days one summer thirty reindeer were killed and a half dozen more were seen. The Arctic bow-head whale and other whales are not as numerous as in other days but still supply some food for the Eskimo. On land there are the elk, the mountain sheep, caribou, muledeer, moose, bison, squirrels of several sorts, bear, polar bear, ground bear, otter, badger, weasel, wolverine, seals of several species —the Alaska fur seal, the rough seal, and the bearded seal—besides the Pacific walrus. These are only a few of the animals.

Fish, according to Anderson are very plentiful, altho there are few species. With a gill net one secures enough in the summer to feed the family and dogs. The McKenzie Delta is one of the most important of the fish regions. Here fish is stored for winter consumption. The Copper Eskimos in 1908 were just beginning to use the fish nets, but the McKenzie Delta Eskimos and those farther west have long used gill nets. These are set off shore or at the mouths of rivers during the summer. In the winter fish is secured thru the ice holes

FIG. 6. A few of many types of small Arctic animals
Herring Gull — Parry's Spermophile — Yellow-billed Loon
Sabine's Gull — Lapland Longspur

with decoys and spears and with hooks. The Coronation Gulf Eskimo, that is the Copper Eskimo, uses little fish, but Stefansson found suckers, herring, salmon trout, lake trout, bullhead, cod, and jack fish in great numbers in the mouths of streams that flow into Coronation Gulf.

The bird student of the United States would find little difficulty in identifying the several score of birds that are common to the Arctic region in summer. Gulls, herons, pelicans, various kinds of duck, swans, cranes, and various other water birds common to the ponds and lakes of our country, woodpeckers, sap suckers, Canadian jays, crows, bronze grackles, purple finchs, rusty blackbirds, snow buntings, many kinds of sparrows, many kinds of warblers, the little ruby crowned kinglets and many other familiar species are found widely distributed over the Arctic slopes of Canada and Alaska, having migrated many hundreds of miles from their winter homes in the South.

The winter in the Arctic comes on quickly. The first freeze occurs in early October and long before the close of the month the ice is strong enough to travel on. Then some of the caribou begin to migrate southward from the Arctic islands to the mainland. In late November or early December when the ice is thoroly frozen and snow begins to fall and pack, the Eskimo goes out to the sea and constructs his winter home, locating the villages generally where there is an accumulation of well-packed snow, as previously stated. The thermometer rarely goes below zero in December. The thermometer may go, during the winter, as low as forty or fifty degrees below zero but this is only for a few hours or at most a few days. Stefansson reports the thermometer on March 31 at 6:00 A.M. as being −46°F. but by 4:30 P.M. on the same day it stood at only −9°F. The coldest ever recorded at Fort McPherson, a Hudson Bay Company's post, is −68°F., and this temperature has been reached at Havre, Montana. Snowfall is always light, because the *actual* at low temperatures is small. It is claimed by Arctic explorers that from 75 per cent to 90 per cent of the land is free from snow all the year. The snowfall rarely ever amounts to more than from four to six inches, measured as water, a striking contrast to the great depth that sometimes falls in New England or Washington state.

The winter nights are not depressing as some writers have led us to believe. It is rarely noticed by the people of the Arctic or by the whites acquainted with the Arctic. In extreme darkness, of course, the Eskimo does not hunt and must see to it that he has a good supply

of food for a month or two. This is his recreation time. He goes visiting, sometimes for scores or even one hundred or so miles, and during this season there is much singing and dancing and revelry. Life is strenuous, of course, for the Eskimo, and he has no surpluses. Food is scarce at times, but he is generally happy, because he has good wholesome food and is in good health. He finds it easier to secure a living than most of us do in warmer climes.

Spring and summer come quickly. In the course of three or four days the hot sun in the long days will melt all the snow away. The summer is short, of course, and Stefansson reports ice hard enough for travel as late as June in Coronation Gulf in 1915. Summer temperatures seem to migrate eastward from the Mackenzie Delta. There is probably a month's difference in temperature between the Mackenzie Delta and Dolphin and Union Straits, and the west end of Dolphin and Union Straits is fully a month ahead of the east end, and the south shore of these is ahead of the north on Victoria Island, only sixty miles away. In a southward march one spring Stefansson saw the first thaw of the season on the north side of Dolphin and Union Straits, but two or three days afterwards he reached the south side and found that thawing had been going on there for three or four weeks. The low sun, altho the days are long, never is sufficiently hot to melt all of the great masses of ice. On Great Bear Lake Stefansson found the thermometer at 90°F. every day for five or six weeks. But the high temperature cannot cope with the great mass of ice in the Arctic Sea. Altho the ice breaks up in summer, there are floating cakes to be found at any season of the year in the Arctic Ocean. There are few or no icebergs, but the ice becomes piled up so that it projects from twenty to thirty feet above the surface of the ocean, and along the pressure ridges the ice is pushed up from fifty to one hundred feet above the sea. This of course means great depths below.

As melting begins in the spring sod and snow houses have to be abandoned. It is then that the Eskimos take to their tents. Many of them on the south shore of Coronation Gulf region strike southward to hunt caribou and to secure their supply of wood for utensils.

GEOGRAPHY IN THE NORMAL SCHOOL*

JOHN A. H. KEITH
State Normal School, Indiana, Pa.

Teaching involves more than the mere subject matter that we have on the school program. I believe that this plus-element in each subject can be taken care of under what we are now calling the "project method." If normal schools are making a contribution to the teaching of geography, it would be fairly stated as an emphasis upon the project method with the purpose of making geography a real educative element in the lives of boys and girls in the elementary school.

As you know, our teaching began as mere telling, and hence grew up the belief that anyone could teach who knew. The echo of that belief is still found even in institutions that prepare teachers, in this form, that the individual must know the subject matter before he is ready to teach it, or to study methods of teaching it.

In many normal schools arithmetic is taught and later the method of teaching arithmetic; United States history is taught and later the method of teaching it; geography is taught and later the method of teaching geography. Any such division, I believe, defeats its purpose. It gives the prospective teacher the wrong idea; it seems to separate method from material and there is no such thing as method separate from matter and material. There is such a thing as material apart from method. There is such a thing in the world as fact and principle, in geography, in arithmetic, etc. Therefore, there can be an academic treatment of subject matter without any reference whatever to the ultimate teaching utilizing of it, but there can be no discussion of method that does not involve material.

What should a normal school do? It should prepare teachers in professionalized subject matter, if I may use the term. That is, the course in geography should not be mere geography, nor mere method, but should be a combination of both of these. Consider the great field of education suitable for fifth grade children. How should it be wrought out? The teacher should see it as it is seen by fifth grade children. The prospective teacher should master the way of working this field out with children so that it will function in the lives of girls and boys in the schoolroom.

I believe that the big contribution that will be made by the normal

* An address delivered before the Geography Round Table of the Pennsylvania State Teachers' Association, Dec. 29, 1922.

schools of the United States in the next ten years is the amplification of this specialized and professionalized subject matter idea and ideal.

I have long had the idea that every prospective teacher should re-create the thing we call subject matter from the teacher's point of view. This is difficult from the standpoint of the student. The student's mind in high school and grade ought to work very largely by what the psychologists call synthesis—a putting together—a bit today, another bit tomorrow, and so on. When children recite, their replies are, for the most part synthetic activities of the mind.

No person can teach the subject matter clearly unless he has the subject as a whole in his mind, and sees the relations of the things that make up its parts: i.e., views it analytically. Teachers are forced to this analytical view of subject matter, and there is where most teachers fail. The subject matter must be taken in as a whole in the mind and then taken in its parts. This is what is called analyzing for presentation to the class.

In the normal school, and taking geography as an illustration, the plan of using the synthetic method of adding knowledge day by day, and then later taking it from the other point of view, how to teach it in school, is wasteful of time and energy, and we will have to come to a method such as is used in schools of law, medicine, and engineering. The normal schools should develop their material from the standpoint of professionalized subject matter. This is the big contribution which the normal schools will make in the next ten years to the increased effectiveness of teaching.

If the normal school is to make any contribution to geography, I think its first service is in classing it with the social studies, instead of with the sciences, and thinking of it as a series of relationships which have grown out of social needs, and also impressing this view upon those who are preparing to teach. A second service is applying the project method to geography, not simply as a method of teaching geography, but as a method of making geography one of the educational agencies of the child's life in school and carrying along with it intelligently and rationally those things that naturally adhere to it.

We try to give the normal school student the impression that the thing that is being learned will be useful to him or her as a prospective teacher, and we therefore secure a wholesome attitude on the part of the normal school students themselves toward history, geography, mathematics, etc. We are making an honest, sincere effort to make geography the humanizing, socializing thing that it should be in the lives of boys and girls.

SUMMER COURSES IN GEOGRAPHY

COMPILED BY F. E. WILLIAMS

University of Pennsylvania

The following educational institutions sent data of summer school work in geography.

University of Colorado, Boulder, Colo.

General Geology. Prof. McCourt and Asst. Prof. Shipton
Field Geology. Mr. Thompson and Asst. Prof. Shipton
Historical Geology. Assistant Professor Shipton
Minerals and Rocks. Assistant Professor Shipton
Advanced Physiography. Assistant Professor Shipton
Regional Geology of the United States. Assistant Professor Shipton
Problems in Rocky Mountain Geology.
Climatology. Mr. Thompson
General Geography. Assistant Professor Thomas
Field Geography. Assistant Professor Thomas
Geography of Europe. Assistant Professor Thomas
Geography of Asia. Assistant Professor Thomas
Geographic Influences. Professor McCourt
Geography of Commercial Commodities. Mr. Thompson
Geography of Trade. Assistant Professor Thomas
Political Geography. Assistant Professor Thomas
Field Courses at the Mountain Laboratory. Professor McCourt, Mr. Thompson and Mr. Hanley

Headquarters are at Science Lodge adjoining the University Camp near the continental divide, and about 25 miles from Boulder. The cost is $125.00, including all expenses. Students desiring to register should consult with Professor W. E. McCourt by mail or in person before July 14 (address Washington University, St. Louis, Missouri, until June 25, after that date, University of Colorado, Boulder, Colorado). Courses are offered to three types of students: beginners, advanced, and graduate. The last week is devoted to a trip thru the Rocky Mountain National Park.

Lewiston State Normal School, Lewiston, Idaho

Principles of Geography. Ernest E. Holmes
Geography for Primary Teachers. Ernest E. Holmes
Geography Method (Two sections). Ernest E. Holmes

University of Chicago, Chicago, Ill.

The Technique of Teaching Elementary Geography. Miss Parker
The Teaching of Geography in Secondary Schools. Mr. Leppard
The Technique of Teaching Elementary Geography: Advanced Course. Miss Parker
Organizing Geographic Material for Elementary Schools: Advanced Course. Miss Parker
Investigations of Problems in the Teaching of Geography. Miss Parker
The Elements of Geography. Assistant Professor Whittlesey
Economic and Commercial Geography. Assistant Professor Platt
Geography of North America. Associate Professor Colby
Field Course: The Geography of Chicago and Its Environs. Associate Professor Jones
Field Geography. Assistant Professor Platt.

Four weeks will be spent in the Green Bay Region of northeastern Wisconsin, beginning June 18.

Meteorology. Professor Goode

Geography of South America. Associate Professor Colby
Geography of Europe. Professor Goode
Geography of Asia. Associate Professor Jones
Political Geography. Assistant Professor Whittlesey
Pro-Seminar. Associate Professor Colby
Research Course. Professor Goode, Associate Professors Jones and Colby, and Assistant Professor Whittlesey

University of Illinois, Urbana, Ill.

S 1. Principles of Geography. Miss Bessie Ashton
S 8. Geography of Europe. Dr. Blanchard
S 14. Weather and Climate. Dr. Blanchard

Northwestern University, Evanston, Ill.

SA2. Physiography and Geology.
SA6. Human Geography. Professor W. H. Haas
SC7. Geography of South America. Professor W. H. Haas
SCX. Field Course in the Lake Superior Region. Professor U. S. Grant

Open to men who have completed at least a year's course in geology, but more work than this will be an advantage. The course will begin about August 6 to 13 and last four weeks. A detailed report will be required. Advanced students may obtain additional credit and may secure material for Masters' theses. Tuition, $50. Correspondence concerning this course should be addressed to Professor U. S. Grant, University Hall, Evanston.

Chicago Normal College, Chicago, Ill.

The Teaching of Geography in the Elementary Schools. I. N. VanHise and Marion Sykes
Industrial and Commercial Geography, Part I. Foods. I. N. VanHise and Marion Sykes
The Geography of Europe. I. N. VanHise
The Geography of North America. Marion Sykes

Northern Illinois State Teachers' College, DeKalb, Ill.

First Term (June 4 to 29)
Principles of Geography. William C. Gould
Geography for Grade Teachers. William C. Gould
Second Term (July 2 to Aug. 24)
Principles of Geography. Fred Carlson
Regional Geography. Fred Carlson
Commercial and Industrial Geography. Fred Carlson
Geography of Illinois. William C. Gould
Geography for Grade Teachers. William C. Gould
Physiography. William C. Gould

Illinois State Normal University, Normal, Ill.

First Term (June 11 to July 20)
Geographic Controls R. G. Buzzard
Influences of Geography on American History. R. G. Buzzard
Physical Geography. H. H. Russell
Geography of the Eastern Continents. Bert Hudgins
Climatology. Bert Hudgins
Commercial Geography. Miss Mabel Crompton
Geography of North America. Miss Mabel Crompton
Geography Method for Rural Schools. Miss Eulalia Tortat
Home Geography. Miss Eulalia Tortat
Intermediate Geography. Miss Eulalia Tortat
Second Term (July 23 to Aug. 29)
Geography of Europe. H. H. Russell

Human Geography. H. H. Russell
Intermediate Geography. H. H. Russell
Geography of the Eastern Continents. Bert Hudgins
Advanced Physiography. Bert Hudgins
Commercial Geography. Mabel Crompton
Conservation of Natural Resources. Mabel Crompton

Indiana State Normal School, Terre Haute, Ind.
The Teaching of Geography in the Primary Grades. B. H. Shockel
History of Geography. B. H. Shockel
United States. W. A. McBeth
Recent Political Geography. W. A. McBeth
Indiana and the Central West. W. A. McBeth
The Teaching of Geography in Grades 6 and 7. W. A. McBeth
Historical Geology (Two sections). A. H. Sutton
Geographic Influences in American History. A. H. Sutton
Elements of Geography. A. H. Sutton
The Teaching of Geography in Grades 4 and 5 (Four sections). Mina Southard
Physiography. H. Byrn

Iowa State Teachers College, Cedar Falls, Iowa
Principles of Physiography. Mr. Cable
Climatology and Meteorology. Mr. Cable
Principles of Geography. Miss Aitchisen, Miss Engle, Messrs. Brown, Halverson, and Hartshorne
Geography of North America. Miss Engle
Geography of Europe. Mr. Hartshorne
Regional Geography. Miss Aitchison

State Teachers College, Pittsburg, Kansas
High School credit
Commercial Geography
Elements of Geography
Physiography. Miss Roseberry
Primary Geography. Miss Roseberry
Commercial Geography. Mr. McFarland
Physiography. Mr. McFarland
College credit
Physiography. Miss Roseberry and assistant
Physiography. 1a. Miss Roseberry and assistant
Physiography. 1b. Mr. McFarland
Industrial Geography.
Geography of American History. Miss Roseberry
Primary Grade Geography. Miss Roseberry and assistant
Grammar Grade Geography. Miss Roseberry and assistant
Commercial Geography. Mr. McFarland
Regional Geography. Mr. McFarland
Geography of Europe. Mr. McFarland
Current Geography.

Clark University, Worcester, Mass.
SS 111. Physical Geography. Mr. Atwood
SS 122. The Passing Weather. Mr. Brooks
SS 153. Human Geography for the Elementary Grades. Mrs. Thomas
SS 162. Local Field Geography. Mr. Ridgley
SS 181. Economic and Commercial Geography. Mr. Jones
*SS 213. The Regional Treatment of Geography. Mr. Atwood

*SS 224. Climatic Environments. Mr. Brooks
*SS 252. The Geographical Changes Resulting from the World War. Mrs. Thomas
*SS 261. The Teaching of Geography in Normal Schools and Teachers' Colleges. Mr. Ridgley
*SS 282. Geography of North America. Mr. Jones
*SS 313. Research in Regional Geography. Mr. Atwood
*SS 323. Research in Climatology. Mr. Brooks
*May be taken for graduate credit.

State Teachers College, Mankato, Minn.
Elements of Geography (Two sections). Geo. J. Miller, E. Marie Puder, and Leone Keller
Geography of North America. Geo. J. Miller
Pro-Seminar. Geo. J. Miller

State Teachers College, Bemidji, Minn.
Geography Methods. Roy Schofield
Physical Geography. Roy Schofield
Commercial and Economic Geography. Roy Schofield
A continential study; probably Europe. Roy Schofield

University of Missouri, Columbia, Mo. June 18 to Aug. 11
General College Geography. James R. Cowan
Geographic Influences in American History. James R. Cowan
Pro-seminar, for upper classmen preparing to do graduate work in geography. James R. Cowan
Seminar, for graduate students in geography able to do semi-independent work. James R. Cowan
Research, for graduate students. James R. Cowan

Central Missouri State Teachers College, Warrensburg, Mo.
World Geography. Professor H. A. Phillips and assistants
Geography of North America. Professor H. A. Phillips and assistants
Geography of Europe. Professor H. A. Phillips and assistants
Methods in Geography. Professor H. A. Phillips and assistants
Physical Geology. Professor H. A. Phillips and assistants

Columbia University, New York City. July 9 to Aug. 17
The Geography of France. Professor Raoul Blanchard
Physical Geography and its Economic Aspects. Dr. Frank J. Wright
Physiography of the Western United States. Dr. Frank J. Wright
Geographic Delineation and Map Interpretation. Dr. Armin K. Lobeck
The Geography of Europe. Dr. Armin K. Lobeck
The Geography of South America. Dr. George M. McBride
Mathematical Geography. Dr. Frederick Slocum
Economic Geography. John E. Orchard
The Teaching of Geography in the Lower Grades. DeForest Stull
The Teaching of Geography in the Upper Grades. DeForest Stull
The Essentials of Geography. DeForest Stull

s117A. Field Work in Physiography. Dr. A. K. Lobeck

Field work in physiography before the opening of the Summer Session, in three of the great scenic regions of the West: the Rocky Mountains of Colorado, Yellowstone National Park, and Glacier National Park. Written report required for credit. Four weeks in the field: June 9 to July 4, tentative dates. Total field expenses estimated at $275 on basis of round trip from Chicago. For information, write Professor A. K. Lobeck, University of Wisconsin, Madison, Wisconsin.

s117B. Field Work in Physiography. Dr. A. K. Lobeck

Field work in physiography at the close of the Summer Session in some of the most attractive and instructive parts of New York and New England: the Hudson, the Gorge

thru the Highlands, Mt. Beacon, the folded mountains at Catskill, the northern end of the Great Appalachian Valley, the Adirondack Mountains, Lake George, Lake Champlain, the Green Mountains, and the White Mountains. Written report required for credit. Twelve days in the field: August 18 to 29, inclusive. Total field expenses estimated at $100. For information, write Professor A. K. Lobeck, University of Wisconsin, Madison, Wisconsin.

Cornell University, Ithaca, New York

Meteorology and Climatology. Assistant Professor Mordoff
General Astronomy. Professor Boothroyd
Visual Aids to Instruction. Mr. Abrams
Physical Geography. Professor von Engeln
Commercial Geography. Professor von Engeln
The Geography of Europe. Assistant Professor Williams
Geographic Influences in American History. Associate Professor Bratton
Geology. Associate Professor Monnett
Mineral Resources. Associate Professor Monnett
Latin America. Assistant Professor Williams
Cartography. Associate Professor Bratton
Teachers' Course. Professors Bratton & Williams

Laboratory and Local Work in both Geology and Physiography. Excursions to Taughannock Gorge and Falls, Enfield Gorge and Falls, Connecticut Hill, Watkins Glen, and Niagara Falls (2 days).

Cleveland School of Education, Cleveland, Ohio

The Principles of Elementary School Geography. Miss Matchett
The Teaching of Elementary Geography. Miss Matchett
The Regional Geography of the United States. Mr. Gregory.
The Geography of Europe and South America. Mr. Gregory
Field Course in Major Industries. Mr. Gregory, Miss Matchett and assistant.

This course consists of twenty-four field trips for the intensive study of major industries. The course offers opportunity for the first-hand study of industrial and commercial operations.

Miami University, Oxford, Ohio

Physical and Economic Aspects of the Local Environment. Jane K. Atwood
Economic Geography of South America. Jane K. Atwood
Industrial Geography of United States. W. R. McConnell
Elements of Geography (Two sections). Jane K. Atwood, and W. R. McConnell
Principles of Geography. W. R. McConnell

Ohio State University, Columbus, Ohio

Principles of Geography. Both Terms
Economic Geography. Both Terms
Historical Geography and Commerce of the United States. First Term
Geography and History of Commerce. Second Term
Localization of Manufacturing in the United States. Both Terms
Political Geography of South America. Both Terms
Instructors: Dr. Fred A. Carlson, Forest I. Blanchard, and Paul G. Eckelberry

Oberlin College, Oberlin, Ohio

Field Course. Professor G. D. Hubbard

The course serves as a basis for the teaching of physiography and geology, and as preparation for advanced work. It is given in Virginia and West Virginia, where New River cuts thru the Appalachians. The work includes topographic and geologic mapping, description of formations, collection of fossils, interpretation of the physiography, and of the structures below. Students rent equipment from the Department, and camp during

the entire course. The cost for the seven weeks' course, aside from transportation, will probably not exceed $125. Prerequisite, one year of geology.

Ohio University, Athens, Ohio
- Geography and Method. Professor C. E. Cooper and Assistant Professor La Fleur
- Economic Geography of North America. Assistant Professor La Fleur
- Geography and Environment. Professor Cooper

University of Pennsylvania, Philadelphia Pa. July 2 to Aug. 10
- The New World (Six weeks course). Erna Grassmuck and Carrie Adler
- Geography in the Elementary and Junior High Grades, (Two periods daily, first three weeks). Erna Grassmuck
- Principles of Geography. (Two periods daily, second three weeks). Carrie Adler
- Geography and Industry of the United States (Wharton School). Mr. Beebe

University of Pittsburgh, Pittsburgh, Pa. June 25 to Aug 3
- Director of Summer Course in Geography. Erna Grassmuck
- The World Today. Dr. Fred K. Branom
- Geography in the Elementary Years. Dr. Fred K. Branom
- Principles of Human Geography. Marguerite Uttley
- Geography in the Upper or Junior High Years. Marguerite Uttley
- Special Conferences for Superintendents and General Supervisors. July 23 to Aug. 3. Erna Grassmuck

The Pennsylvania State College, State College, Pennsylvania.
- Director of Summer Course in Geography. Erna Grassmuck
- Principles of Geography. (Six weeks). Henry F. James
- Geography of the United States and Canada. (Six weeks). Dr. Helen M. Strong
- The Geography of the Post-War World. (Two weeks). Professor Ray H. Whitbeck
- Physical Geography. (Six weeks). Assistant Professor Clair W. Robinson
- European Countries. (Six weeks). Henry F. James
- Latin America. (Six weeks). Dr. Helen M. Strong
- Intermediate Geography. (Eight weeks). Olive Park
- Junior High School Geography and General Science. (Eight weeks). Margaret Smythe
- Physical Geography. (Eight weeks). Assistant Professor Clair W. Robinson
- Economic Geography. (Eight weeks). Assistant Professor Carl W. Hasek

Edinboro State Normal School, Edinboro, Pa.
- The Teaching of Geography. Miss R. K. Wells
- World Problems in Geography. Miss R. K. Wells

Millersville State Normal School, Millersville, Pa.
- The Teaching of Geography.
- Principles of Geography.

Indiana State Normal School, Indiana, Pa.
- Teaching of Geography. Zoe A. Thralls
- Economic Geography of the United States. Zoe A. Thralls
- World Problems. Zoe A. Thralls

East Tennessee State Normal School, Johnson City, Tenn.
- Geography and Methods. Miss Yoakley
- Principles of Geography. Miss Yoakley
- Commercial and Industrial Geography. Miss Yoakley
- Geography of North America. Miss Yoakley
- Review Geography. Miss Yoakley

The West Texas State Normal College, Canyon, Tex.
- Principles of Human Geography. (First Term). Darthula Walker
- Commercial and Industrial Geography: Commodities. (First Term). Darthula Walker

Commercial and Industrial Geography: Industrial Centers and Transportation Routes. (Second Term). Darthula Walker
Geography of Texas. (Second Term). Darthula Walker
Teaching Geography in the Grades. (Second Term). Darthula Walker

Sam Houston State Teachers College, Huntsville, Tex.

Sub-College Courses
Natural Regions of the Continents. Harriet Smith
Principles of Human Geography. Harriet Smith
Commerce and Industry. Harriet Smith

College Courses
Physiography. Harriet Smith
First Unit in Business Geography. Harriet Smith
The Geography of Texas. Harriet Smith
The Geography of North America. Harriet Smith
Elements of Geology. Harriet Smith
Methods of Teaching Geography in the Elementary Grades. Harriet Smith

A field trip to study the geography of the Western States is planned to occupy the last five weeks of the summer quarter for a small group of college students in geography who will receive college credit for the course. The itinerary will cover some of the most interesting of the National Parks with side trips to other points of interest.

University of Virginia, University, Va.
Physical Geography. Loulie C. Kelley
Commercial Geography. J. T. Fentress
Project Method of Teaching Geography. Mamie E. Rohr
Economic Geography. W. J. Hayes
Geology. W. J. Hayes

University of Wisconsin, Madison, Wis.
Physical Geography. G. H. Smith
Commercial and Industrial Geography. Professor Finch
Geography of North America. Miss Loft
Geography of South America. Mr. Trewartha
Geography of the Far East. Professor W. D. Smith
The New World. Professor Whitbeck
Geography of American Cities. Professor Whitbeck
Climatic Factors in Geography. Mr. Trewartha
Climate and Man. Mr. Miller
Field Course, four weeks, at Devils Lake in August. Mr. G. H. Smith
Rocky Mountain field course, June 9 to July 4. Yellowstone Park, Glacier Park, Colorado Rockies. Dr. A. K. Lobeck

Whitewater State Normal School, Whitewater, Wis.
Principles of Geography and Methods. W. C. Fischer and H. O. Lathrop
The New World. W. C. Fischer and H. O. Lathrop
Commercial Geography. W. C. Fischer and H. O. Lathrop
Geography of Wisconsin. W. C. Fischer and H. O. Lathrop
Rocky Mountain Field Course. W. C. Fischer and H. O. Lathrop

Description: At the close of the 1923 summer session, the Whitewater State Normal School offers a field trip in the northern and southern Rockies. The trip begins July 28, at 11 P. M. from Chicago and closes August 21. Address all correspondence to W. C. Fischer, Instructor in Geography and Geology, Whitewater, Wisconsin.